ALLFETT®

Centralized Lubrication Systems & Equipment

ALL-10 EC

ELECTRICAL GREASE PUMP

INTRODUCTION & USER MANUAL

Please read before using the product.

2 YEARS WARRANTY

THE PHYSICAL LIFE DETERMINED BY MINISTRY OF INDUSTRY AND TRADE OF TURKEY IS 10 YEARS.

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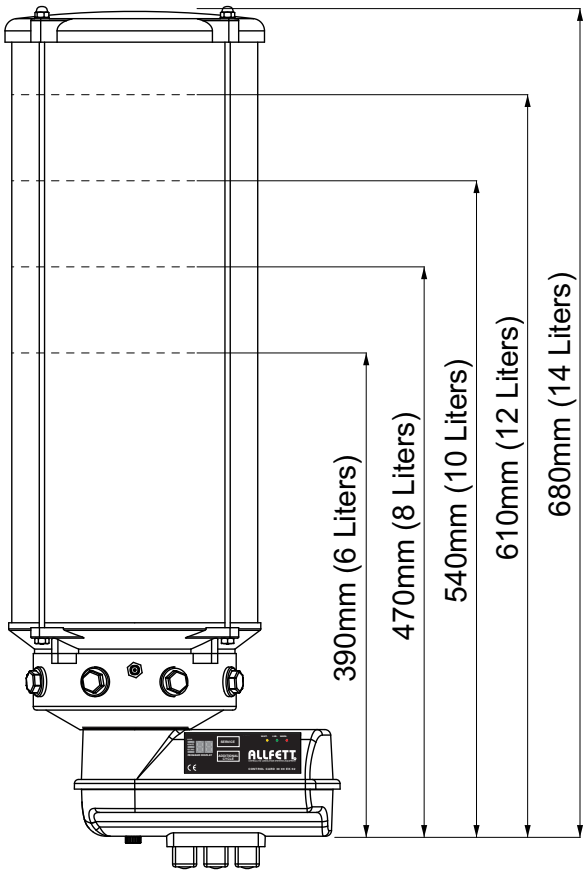
PRODUCT DESCRIPTION

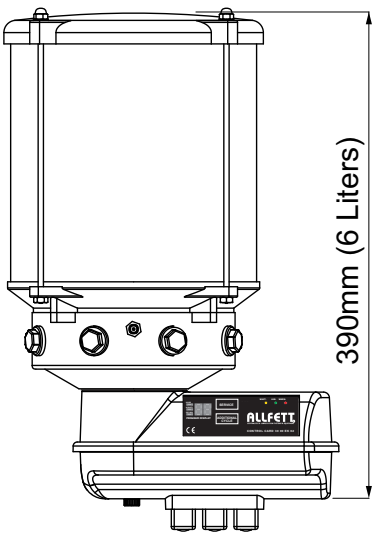
ALL-10 EC pumps are piston type centralized lubrication system units. Electronic control card is embedded in the motor cover to adjust waiting and working time periods. There are pump elements to generate pressure for grease inside pump and these pump elements can be add up to 6 piece to pump body. Grease reservoir is made by transparent polycarbonate to be seen easily grease inside. In case of pump assembled such places that pump can not be seen, lubrication level can be controlled by ALLFETT low level indicator to warn operator for low level of grease. 2 different type of top covers can be apply to pump optionally for filling grease.

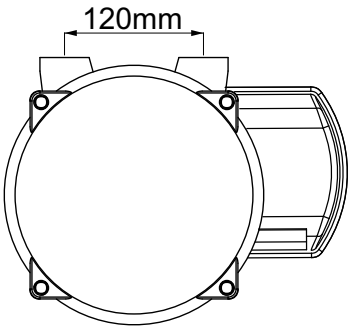
GENERAL SPECIFICATIONS

Motor type	: 12 - 24 V DC
Max. pressure	: 400 bar.
Protection class	: IP 54
Grease type	: NLGI 0 - 1 - 2 - 3
Displacement	: 2.5-3 cm³ / minute
Working temperature	: -25°C +80°C
Reservoir	: 8 - 10 - 12 - 14 Liters
Waiting times	: 10 - 120 minute
Working times	: 2 - 30 minute
Working voltage	: 10 - 30 V DC
Alerts	: Blow of fuse,
	: Fault, Alarm

Figure 1 Dimensions







PRODUCT COMPONENTS AND OPTIONAL EQUIPMENTS

Figure 2 Components

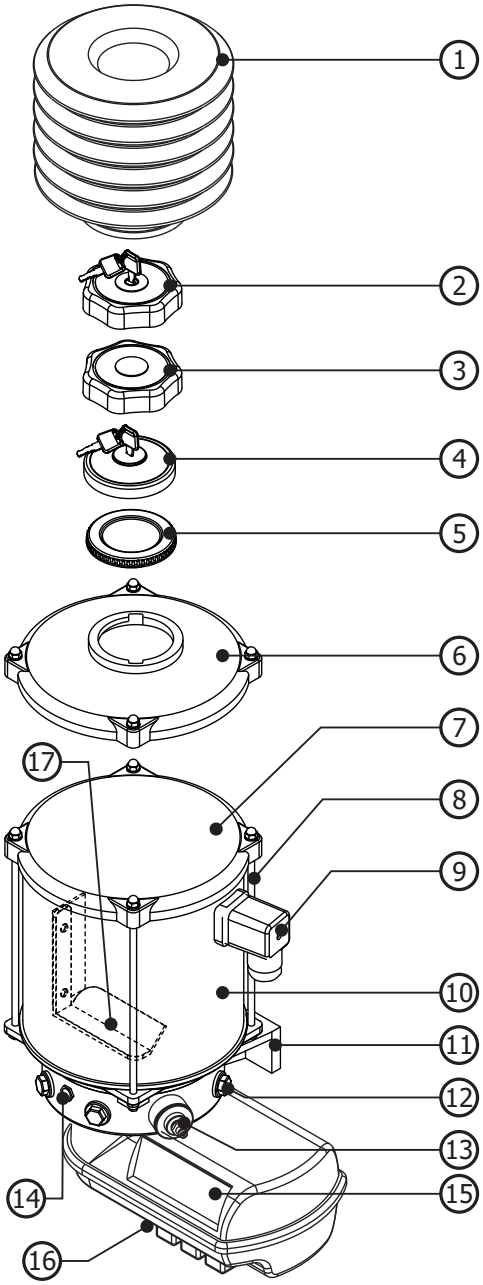


Figure 3 Pump Body

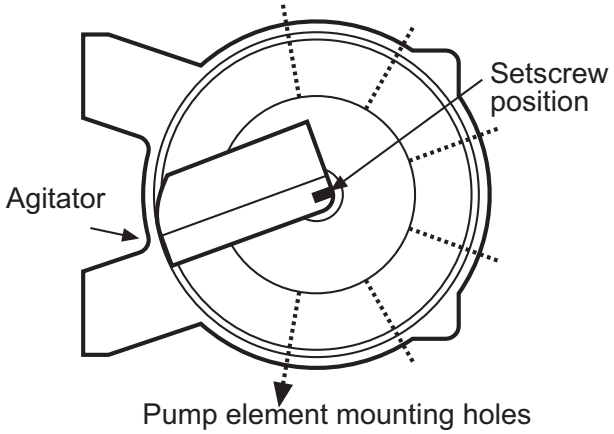
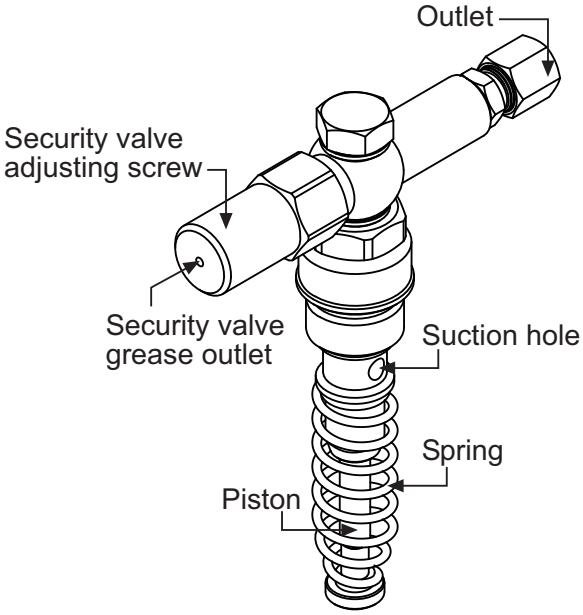


Figure 4 Pump Element



1. Grease filling bellow (**Optional**)
2. Lockable type plastic cover (**Optional**)
3. Big type plastic cover (**Optional**)
4. Lockable type metal cover (**Optional**)
5. Standard type plastic cover (**Optional**)
6. Filling type top cover (**Optional**)
7. Standard top cover
8. Rods
9. Level indicator
10. One piece reservoir 6 liters
11. Assembly holes
12. Pump element mounting holes
13. Grease filling filter (**Optional**)
14. Grease nipple
15. Electronic control panel
16. Electrical cable socket
17. Agitator

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ELECTRONIC CONTROL CARD PROGRAMMING INSTRUCTIONS

Steel coupling (**Figure 6**) with magnet where bottom side of the motor cover should be used for programing control card. Magnetic side of the coupling should be touched on **SERVICE** and **ADDITIONAL CYCLE** Sections of the control card label shown in **Figure4**. If coupling lose, a strong magnet should be used insted.

1. Please touch **SERVICE** section **twice** to start programming. After pressing, first section of program display will start to flash and green led will be light up. This means working time period will be adjusted first.
2. Touch the ADDITIONAL CYCLE section untill the number you want to adjust be appears on first digit on program display. Stop touching until number you need is appeared. Please touch only once to SERVICE section for control card memorize your choise and go to next digit. Touch the ADDITIONAL CYCLE section again untill the number you want to adjust be appears on second digit on program display. Stop touching ADDITIONAL CYCLE section until number you need is appeared. touch only once to SERVICE section for control card memorize your choise. After hour led will start to flash that means time unit will be selected. Touch the ADDITIONAL CYCLE section again untill the unit you want flashes. Please touch only once to SERVICE section for control card memorize your choise and go to next step. Working time period is memorized by control card.
3. First section of program display will start to flash and yellow led will be light up. This means waiting time period will be adjusted.
4. Please repaet the same steps as working time period programing. After selecting time unit of the waiting time period and touching SERVICE section all the leds will be fade for a short time and light again.

Electronic control card will start the pump from working time period you chosed.

If ADDITIONAL CYCLE section is touched for 2 seconds while control card operating, waiting or working times which is on will be shown as counting down on program display.

WARNINGS

1. While programming the time periods on the card memory, the time interval for touching the sections must be in 20 seconds. If 20 second is passed without touching, electronic control card exits from the program menu and operations before you did will not be allowed. In this case, card will start to operate with last succesfull programming values.

2. In case of power breakdown while pump runs at waiting or working time periods, control card will remain it’s position before breakdown and resume after power comes. Power breakdown does not make any change on the structure of the previous program.

3. In case of foult coming from motor or control card, please contact with ALLFETT servise. Motor cover must not be opened.

ELECTRONIC CONTROL CARD SCHEMAS

Figure-4 Control Card Label

WAIT. : Yellow LED (Waiting)

LUB. : Green LED (Lubricating)

WARN. : Red LED (Warning, Fault)

HOUR : Shows unit of time.

MINUTE : Shows unit of time.

SECOND : Shows unit of time.

PROGRAM DISPLAY : This led shows programming numbers.

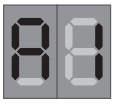
SERVICE : Using to start programming.

ADDITIONAL CYCLE : Using to lubricate only one time except the programmed working time. And also using to change numbers while programming.

ATTENTION: SERVICE and **ADDITIONAL** sections of the card are not buttons. Please check the programming instructions of the card for how its used.

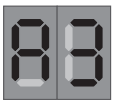
Figure 5 Alarm list

Alarms listed below are shown on **PROGRAM DISPLAY** kısmında gösterilirler. Alarm devrede olduğu sürece PROGRAM DISPLAY yanıp söner durumda olacaktır. Ayrıca alarm süresince **WARN.** ledi (kırmızı led) sürekli yanık durumda olacaktır.

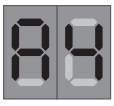


A1 : Low level alarm
This alarm is shown if pump out of grease.

A2 : Pressure alarm
This alarm is shown if adjusted pressure reached.

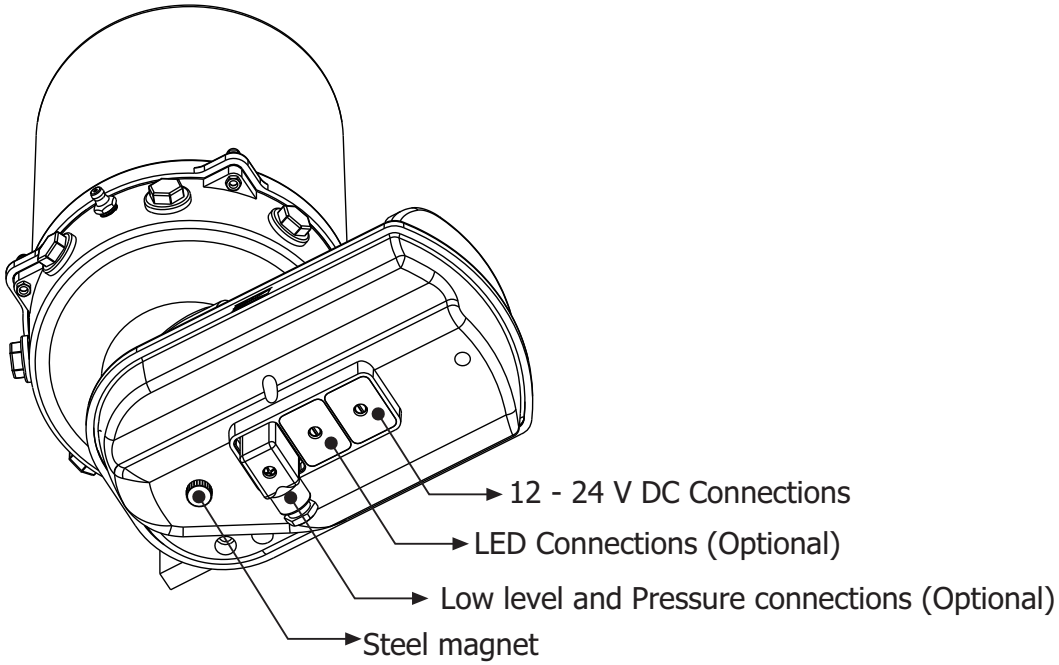


A3 : Motor alarm
This alarm is shown if motor cabels are broken or motor fault.

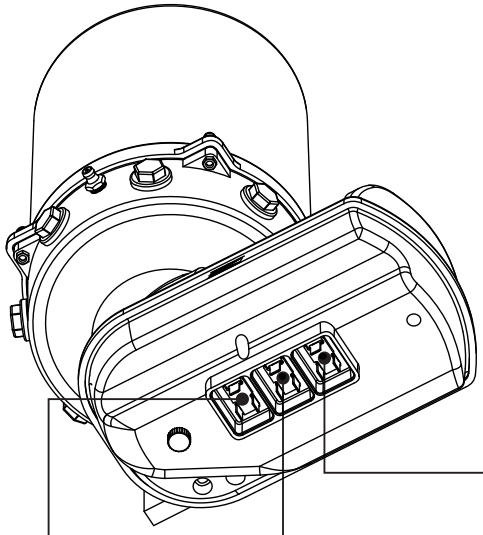


A4 : Fuse broken
This alarm is shown if fuse broken.

Figure 6 Electrical sockets and Steel magnet

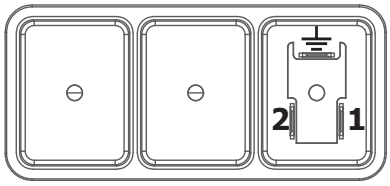


ELECTRICAL CONTROL CARD CONNECTION



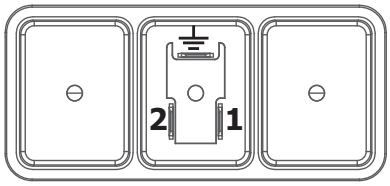
Single electrical socket is standard with EC type pumps. If needed, 2 other electrical sockets can be apply on the pump if optional spesifications wanted to apply on pump.

12 - 24 V DC connections



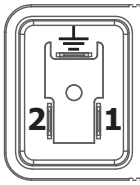
1 : 12-24 V DC (+)
2 : 12-24 V DC (-)
⏚ **:** ADDITIONAL CYCLE

LED connections (Optional)



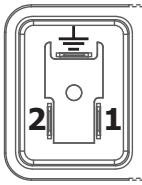
1 : Yellow LED
2 : Red LED
⏚ **:** Green LED

High pressure connections (Optional)



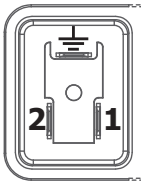
1 : (Blank)
2 : High pressure (+)
⏚ **:** (-)

Low level connections (Optional)



1 : Low level signal
2 : (+)
⏚ **:** (-)

High pressure&Low level con. (Optional)



1 : Low level signal
2 : High pressure
⏚ **:** Common (-)

The (+) cable of level sensore must be connected externally from socket.

RULES TO COMPLY WHILE USING AND WARRANTY CONDITIONS

1 Damages occur while additional transports after delivering the goods from ALLFETT to the customer, **ARE NOT COVERED UNDER WARRANTY SCOPE.**

2 Pumps are produced to lubrication purpose and are not convenient to work more than 2 hours continual. Working continuously under maximum pressure will harm the system. Damages occur from this reason **ARE NOT COVERED UNDER WARRANTY SCOPE**.

3 Washing of the pump under pressured water has objectionable features. Damages occur from this reason **ARE NOT COVERED UNDER WARRANTY SCOPE**.

RULES TO COMPLY WHILE USING AND WARRANTY CONDITIONS

4 Pump reservoir is made of translucent material in order to see the grease level from outside. For this reason, painting of any part of the pump is not adviced. Painted parts **ARE NOT COVERED UNDER WARRANTY SCOPE.** Using **ALLFETT** low level indicator is a reliable system to control the grease level.

5 Pumps, have an electric driven motor and must fed from an appropriate electric source and electrical connections must be done properly. Agitator (**Figure 2**) inside the pump must turn clock wise. (Shown on the grey pump label)

6 Keeping an uncovered cable during system assembly, electric connections may cause fatal damages on systems in which high voltage is turned to low voltages. Cables must be installed properly and electric attack risk must take into consideration.

7 Damages coming from low or high voltage, wrong electric installation, using a different voltage from products definition **ARE NOT COVERED UNDER WARRANTY SCOPE.**

8 Transformer from 220 V AC to 24 V DC is needed if there is no 24 V DC source and it should be minimum 5A.

9 Check the grease properties you will use in the pump to see appropriate NLGI classes. Use NLGI 0 for cold weather, increase the NLGI class up to 3 towards hot weathers. Grease should be Lithium based and EP additive.

10 Grease will be used in the system must certainly be clean and any foreign material must not enter while filling.

11 Pump must be filled from the grease nipple on the pump body. When you refill the pump, if the level of grease is less than the modular glass(as you can not see grease level), grease nipple must be used to prevent air entrance inside the body.

12 If lockable filling cover is used pump must be filled in clean environment to avoid any dust or particules entering to reservoir. Damages coming from the small particules inside the system **ARE NOT COVERED UNDER WARRANTY SCOPE.** Grease filling filter is recomended to use to fill the reservoir from the same hole as pump

13 If the pump is working out of grease pump will try to send air to the points instead of grease and points will not get any grease. Damages on pump and on the system coming from that reason **ARE NOT COVERED UNDER WARRANTY SCOPE.**

14 Because of there is an electrical control card inside motor cover, using high frequency wireless cominication devices 1 meter distance from the pump may couse malfunction. Damages occur from this reason **ARE NOT COVERED UNDER WARRANTY SCOPE**.

15 Electronic control card works between 10 to 30 Voltage. Although there is a protection against high voltage, control card may be broken from high voltage. **RULES TO COMPLY WHILE USING AND WARRANTY CONDITIONS**

RULES TO COMPLY WHILE USING AND WARRANTY CONDITIONS

14 Disassembly or loosen any part of the pump while working is not allowed.Do not take off the top cover to fill reservoir. Damages on pump and on the system coming from those reason **ARE NOT COVERED UNDER WARRANTY SCOPE.**

15 Another goal of Centralized Lubrication Systems is to prevent environment. So it is adviced to fill grease to the systems by mobile or hand pumps.

16 Damages occur while fixing the pump by unauthorized staff **ARE NOT COVERED UNDER WARRANTY SCOPE.**Except the conditions mentioned in **"PUMP MAINTENANCE INSTRUCTIONS"** consult the technical service or leave the maintenance to technical service.

17 Either ALLFETT Mekanik ve Elektronik Sistemler SAN. TİC. LTD. ŞTİ or ALLFETT Pazarlama ve Dış Ticaret LTD. ŞTİ. are not responsible for damages on machines or vehicles coming from reasons above.

QUALITY SYSTEM

ISO 9001
BUREAU VERITAS Certification
N° 30093

This product is produced by **ALLFETT Mekanik ve Elektronik Sistemler San. Tic. Ltd. Sti.** company, which, is certificated by Bureau Veritas with **30093** number of certificate to compatible for ISO 9001:2000 standard and owner of the quality / environment management system

PUMP MAINTENANCE INSTRUCTIONS

1. Pump is not working :

a The system may be at the waiting period. Wait for lubrication time Press the additional cycle area (or touch by a steel magnet in EC type) to obtain one period of lubrication.

b Electrical connections of the pump may be loosen or broken. Check the electrical cables and connections of the system.

2. Pump is working but not sending grease :

a The reservoir could be empty. Fill the reservoir according to items 10 and 11 in **RULES TO COMPLY WHILE USING AND WARRANTY CONDITIONS.**

b There could be air inside the pump element. To take air out, remove pump element from its hole, remove piston and spring on it, put grease inside piston hole by hand, push that grease inside the hole by the piston. Repeat this operation untill you see grease coming without bubble from grease inlet (see figure-6)

PUMP ELEMENT MAINTENANCE INSTRUCTIONS

a. Before the first use of the pump after filling the reservoir, air must be taken out from the system.To do this pump elements should loosen 2-3 tours and, pump should work until there is no air coming out.Then tighten pump elements again until you observe grease coming out without air bubble inside.Then connect the pump elements to lines going through the distributors.

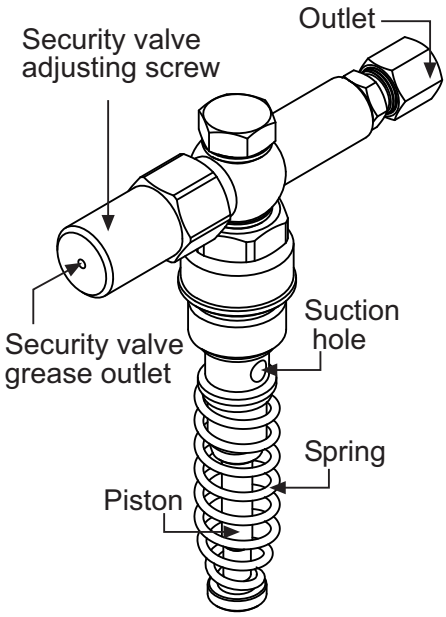
b. If screw on pump element is broken remove the pump element and spring carefully. Pay attentin spring does not fall into body. Change the spring if necessary.

c. If pump element is blocked remove the pump element and clean with diesel based liquid. Assemble it to the pump body after drying with pressurized air.

d. If Sealing ring inside the pump elements check-valve is damaged. Change the sealing ring.

e. If leaking from the security valve it means there is a blockage in one or more lubrication points so distributor feding that point is blocked and other points taking lubricant from that distributor are not getting lubricant. Blockage of a distributor may cause the system to reach very high pressures and explode the lubrication lines.

Figure 4 Pump Element



SERVICE STATION

ALLFETT MEKANÝK VE ELEKTRONÝK SÝSTEMLER SAN. VE TÝC. LTD. ÞTÝ.
Yeni Eyüp Bulvarý, Topçular Caddesi, Set Üstü, No:1 Demirkapý-Rami / Ýstanbul
Telephone : +90 212 501 32 01 (PBX) www.allfett.net
Fax : +90 212 501 33 37 info@allfett.net

ALLFETT®

WARRANTY

Utulisation of this warranty certificate has been permitted by The Republic of Turkey, The Ministry of Industrial and Commerce, The general Administration of Protection of Consumer Right and Competition, in accordance with the law numbered 4077 .

PRODUCER COMPANY

NAME	:	ALLFETT Mekanik ve Elektronik Sistemler San. ve Tic. Ltd. Şti.
CENTRAL ADRESS	:	Yeni Eyüp Bulvarı, Topçular Cad. Set Üstü, No:1 Demirkapı-Rami / İstanbul
TELEPHONE	:	+90 212 501 32 01 (PBX)
FAX	:	+90 212 501 33 37

AUTHORISED PERSON

SIGNATURE - STAMP	:	

PRODUCT

TYPE	:	Electrical grease pump
BRAND	:	ALLFETT
MODEL	:	ALL-10 EC
SERIAL NUMBER	:	.....
DELIVERY DATE / PLACE	:	.....
WARRANTY	:	2 Years
REPAIR TIME	:	30 days

SALER COMPANY

NAME	:	.....
CENTRAL ADRESS	:	.....
TELEPHONE	:	.....
FAX	:	.....
BILL DATE / NR.	:	.....

WARRANTY CONDITIONS

1. The warranty period is two years from the date of delivery.
2. The product including all its components is under the warranty of our company.
3. In case of defects within the warranty period the period spent in repairing is added to the warranty period. The repairing period is maximum 30 days. This period starts from the date of delivery of the product to the services centers or to the seller, the agency the representative, the importer or the manufacturer of the product respectively, in case there are service centers.
4. In case the product has material, workmanship or manufacturing defects, the product will be repaired free of charge and expenses of any sort including labor, the value of the parts replaced or any our charges.
5. The product will be replaced free of charge;
   - If the product permanently disfunctions due to repeating the same defect more than four times within the warranty period
   - If the maximum period for repairing is exceeded.
   - If it is determined that the defect cannot be repaired by report written by the service, or in the absence of service centers, by the seller, agency, representative, importer or manufacturer of the product respectively.
6. The present warranty does not cover damages resulting from importer handling by deviating from the instructions in the manual.
7. General administration of protection of consumer rights and competition in the ministry of industry and commorce may be applied for problems concerning the warranty certificate.

DANGEROUS OR HARMFUL CONDITIONS TO ENVIRONMENTAL AND HUMAN HEALTH DURING USE

All ALLFETT systems are producing according to relevant provisions of security regulations. There is no risk for environmental and human health during use.

PACKING & TRANSPORTATION

All ALLFETT systems are packed with support material to reduce any harm to your mechanic and electronic equipment. But the packages must caried carefully by considering a posibility of a damage.

SERVICE STATION

ALLFETT MEKANİK VE ELEKTRONİK SİSTEMLER SAN. VE TİC. LTD. ŞTİ.
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